



Music + Math = Easier Learning!

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Abstract

When integrating music and math, research shows why music helps students have an easier time learning math and the different strategies teachers were able to use to help their students. From different resources, each one discusses how music helps students learn about patterns and repetition which correlates with math and overall helps the students have an easier time learning math. The students practicing repetition helps the students with their memory skills. Not only will it help them with their short-term memory skills but having the music playing either along with the students or in the background helps the students create a long-term memory skill. They are able to memorize the skill or equation for a longer period of time yet at a faster rate having some type of active rehearse of math problems (Lykins 2015).

Introduction and Research Question

Introduction:
Some students today are still being taught in the traditional format: lectured, being taught out of a textbook, and still insisting that there's only one way to solve the problem. Yet their method of instruction is no longer effective. Teachers need to start incorporating music into math because it helps students with repetition, patterns, memory skills, and keeps them active.

Research Question:
How does music help students with learning about patterns and repetition in math?

Methods

To help find the necessary information to support the hypothesis, research was conducted through the National Council of Teachers of Mathematics and through organizations. The articles that supported the hypothesis discussed key points related to the hypothesis and showed related research.

Results

Listed below is a chart from "Elementary Teachers Integrate Music Activities into Regular Mathematics Lessons: Effects on Students' Mathematical Abilities" (p 13) from Song An, Mary Margaret Capraro, and Daniel A. Tillman's research. An, Capraro, and Tillman had two teachers, one from 1st grade and one from 3rd grade, conduct an integrated math and music lesson for two weeks. These were the results from the pre and post tests based on the students ability level in the different areas (model, strategy, and application). Both classes showed significant improvements showing that integrating the music into the math lessons helped them memorize the math skill.

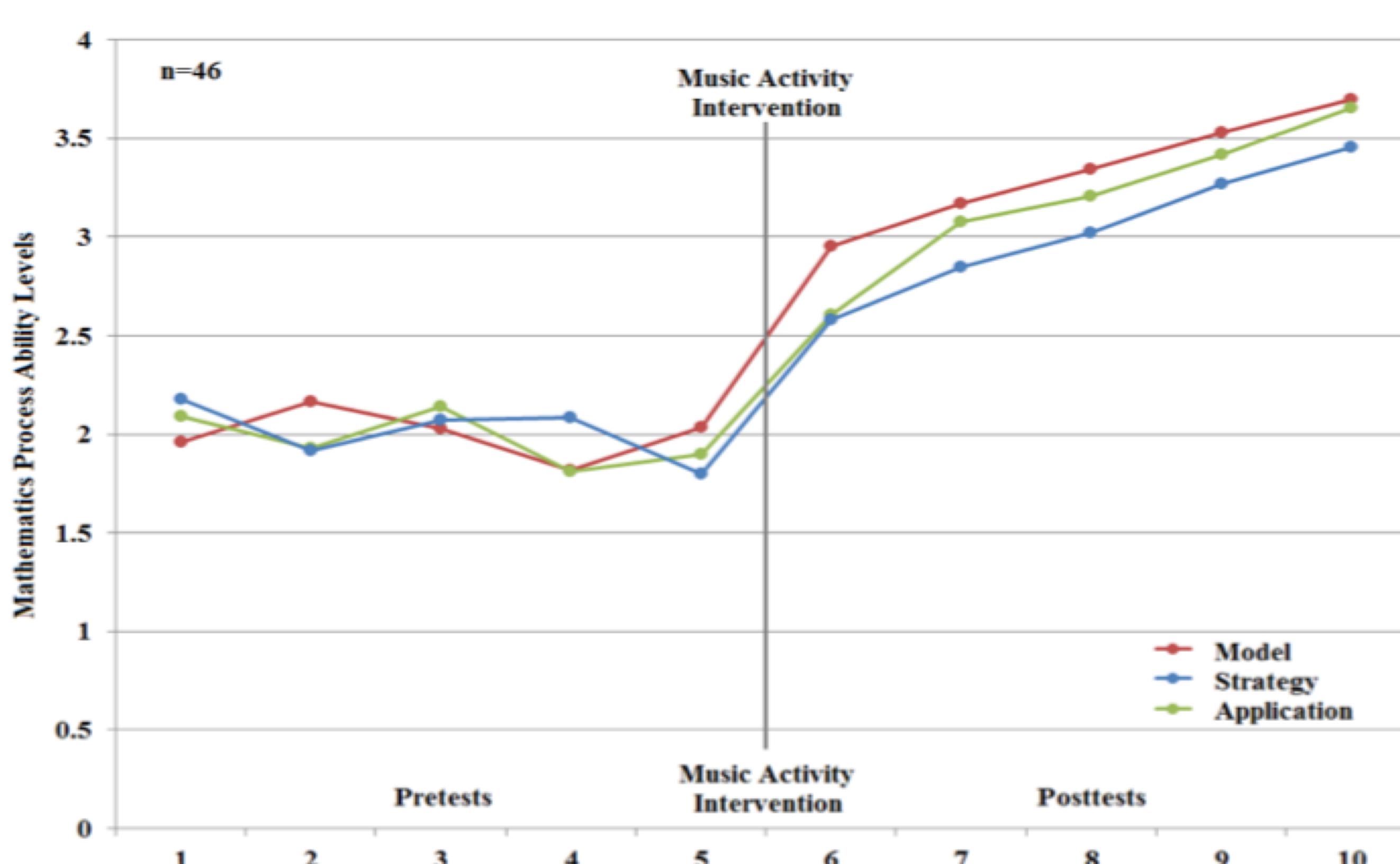


Figure 1. Average ability level for each mathematics process pretests to posttests for first and third grade students.

Figure 1 page 13 Song An, Mary Margaret Capraro, and Daniel A. Tillman "Elementary Teachers Integrate Music Activities into Regular Mathematics Lessons: Effects on Students' Mathematical Abilities" 1 Jan. 2013



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Discussion

Based on the different resources that were researched, majority of them agreed that integrating music into math lessons helps the students in memorizing math skills. The repetition of the song helps the students with their memory, learning, and keeps them active. Doing interactive activities helps the students in memorizing the song along with the necessary math skill. When the students hear the song, they become "hook" on it. Almost like when you have a favorite song that you can't get out of your head. The song sticks with the students and helps them recall the concept both short term and long term.

Conclusions

- Integrating music into math lessons will help students have an easier time learning math.
- Through music, students are able to learn about repetition and patterns which correlates with math.
- Music helps students create both short and long term memory skills which help in math through songs. The songs help the students remember the concept and are able to show significant improvement over a short period of time.

References

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